

# **MINOR SOURCE OPERATING PERMIT OFFICE OF AIR QUALITY**

**Seymour Tubing, Inc.  
1515 East Fourth Street  
Seymour, Indiana 47274**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this permit.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Operation Permit No.: MSOP 071-12403-00019	
Original signed by Paul Dubenetzky Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: August 20, 2001  Expiration Date: August 20, 2006

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## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in Conditions A.1 and A.2 are descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

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The Permittee owns and operates a stationary carbon steel tubing manufacturing source.

Authorized Individual: Grant Graves  
Source Address: 1515 East Fourth Street, Seymour, Indiana 47274  
Mailing Address: 1515 East Fourth Street, Seymour, Indiana 47274  
Phone Number: 812-523-3638  
SIC Code: 3317  
County Location: Jackson  
County Status: Attainment for all criteria pollutants  
Source Status: Minor Source Operating Permit  
Minor Source, under PSD Rules;  
Minor Source, Section 112 of the Clean Air Act

### A.2 Emissions Units and Pollution Control Equipment Summary

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This stationary source is approved to operate the following emissions units and pollution control devices:

- (a) Twenty-nine (29) natural gas fired combustion units, rated at 19.5 million British thermal units per hour, total.
- (b) Two (2) natural gas fired boilers, identified as Boiler #1 and Boiler #2, installed in 1989, rated at 3.5 million British thermal units per hour, each.
- (c) One (1) pretreatment process, consisting of two (2) pickling vats, cold water rinse, phosphate coating, cold water rinse, neutralization and water soluble lubricant, equipped with a scrubber for particulate control, exhausting to Stack S-1, capacity: 5,500 pounds of carbon steel tubing per hour. The scrubber is equipped with a knitted mesh polypropylene demister.
- (d) Twenty-two (22) natural gas fired combustion units, rated at 63.04 million British thermal units per hour, total.
- (e) Twenty (20) cold cutting or rotary disc saws, utilizing a water-soluble coolant that washes metal fines from the carbon steel tubing into a sump for collection, capacity: 22 pounds per hour of carbon steel tubing, each. The emissions from all criteria pollutants are negligible from these saws due to the utilization of the water-soluble coolant.
- (f) One (1) bushing/chamfering machine, capacity: 26.4 pounds per hour of carbon steel metal tubing. The emissions from all criteria pollutants are negligible. This process generates large metal chips which fall into a basket and are emptied by hand.

- (g) One (1) non-organic solvent degreasing process, capacity: 5500 pounds of carbon steel tubing per hour. There are no emissions of criteria pollutants associated with this process. The degreaser utilizes an alkaline wash and cold water rinse.

## SECTION B

## GENERAL CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1.1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

**B.1 Permit No Defense [IC 13]**

This permit to operate does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

**B.2 Definitions**

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-1.1-1 shall prevail.

**B.3 Effective Date of the Permit [IC13-15-5-3]**

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

**B.4 Modification to Permit [326 IAC 2]**

All requirements and conditions of this operating permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of operating permits pursuant to 326 IAC 2 (Permit Review Rules).

**B.5 Minor Source Operating Permit [326 IAC 2-6.1]**

- (a) This document shall also become a minor source operating permit pursuant to 326 IAC 2-6.1.
- (b) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-1.1-7(Fees).
- (c) Pursuant to 326 IAC 2-6.1-7, the Permittee shall apply for an operation permit renewal at least ninety (90) days prior to the expiration date established in this permit. If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied. The operation permit issued shall contain as a minimum the conditions in Section C and Section D of this permit.

**B.6 Permit Term [326 IAC 2-6.1-7]**

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications or amendments of this permit do not affect the expiration date.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source
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### C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

- (a) The total source PM emissions are limited to less than two hundred fifty (250) tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.
- (b) Any change or modification which may increase PM emissions to two hundred fifty (250) tons per year from this source, shall cause this source to be considered a major source under PSD, 326 IAC 2-2 and 40 CFR 52.21, and shall require approval from IDEM, OAQ prior to making the change.
- (c) Any change or modification which may increase potential to emit PM<sub>10</sub>, SO<sub>2</sub>, VOC, NO<sub>x</sub> or CO to 100 tons per year from this source, shall cause this source to be considered a major source under 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

### C.2 Hazardous Air Pollutants (HAPs) [326 IAC 2-7]

Any change or modification which may increase potential to emit to ten (10) tons per year of any single hazardous air pollutant, twenty-five (25) tons per year of any combination of hazardous air pollutants from this source, shall cause this source to be considered a major source under Part 70 Permit Program, 326 IAC 2-7, and shall require approval from IDEM, OAQ prior to making the change.

### C.3 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) after issuance of this permit, including the following information on each emissions unit:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

### C.4 Permit Revision [326 IAC 2-5.1-3(e)(3)] [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) The Permittee shall notify the OAQ within thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

C.5 Inspection and Entry [326 IAC 2-5.1-3(e)(4)(B)] [326 IAC 2-6.1-5(a)(4)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

C.6 Transfer of Ownership or Operation [326 IAC 2-6.1-6(d)(3)]

Pursuant to 326 IAC 2-6.1-6(d)(3):

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAQ, Permits Branch, within thirty (30) days of the change.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by a notice-only change pursuant to 326 IAC 2-6.1-6(d)(3).
- (c) IDEM, OAQ, shall issue a revised permit.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

C.7 Permit Revocation [326 IAC 2-1-9]

Pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to operate may be revoked for any of the following causes:



- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

**C.8 Opacity [326 IAC 5-1]**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

**C.9 Fugitive Dust Emissions [326 IAC 6-4]**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

**C.10 Stack Height [326 IAC 1-7]**

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted by using good engineering practices (GEP) pursuant to 326 IAC 1-7-3.

**Testing Requirements**

**C.11 Performance Testing [326 IAC 3-6] [326 IAC 2-1.1-11]**

- (a) Compliance testing on new emissions units shall be conducted within sixty (60) days after achieving maximum production rate, but no later than one hundred eighty (180) days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAQ, within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

### **Compliance Monitoring Requirements**

#### **C.12 Compliance Monitoring [326 IAC 2-1.1-11]**

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

#### **C.13 Monitoring Methods [326 IAC 3]**

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

#### **C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]**

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
  - (1) This condition;
  - (2) The Compliance Determination Requirements in Section D of this permit;
  - (3) The Compliance Monitoring Requirements in Section D of this permit;
  - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
  - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
    - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

- (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
  - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
  - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied; or
  - (3) An automatic measurement was taken when the process was not operating; or
  - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.

**C.15 Actions Related to Noncompliance Demonstrated by a Stack Test**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected emissions unit while the corrective actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected emissions unit.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

## Record Keeping and Reporting Requirements

### C.16 Malfunctions Report [326 IAC 1-6-2]

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Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a) (1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

### C.17 Monitoring Data Availability [326 IAC 2-6.1-2] [IC 13-14-1-13]

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- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.18 General Record Keeping Requirements [326 IAC 2-6.1-2]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
  - (1) The date, place, and time of sampling or measurements;
  - (2) The dates analyses were performed;
  - (3) The company or entity performing the analyses;
  - (4) The analytic techniques or methods used;
  - (5) The results of such analyses; and
  - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
  - (1) Copies of all reports required by this permit;
  - (2) All original strip chart recordings for continuous monitoring instrumentation;
  - (3) All calibration and maintenance records;
  - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented when operation begins.

C.19 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) The reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) All instances of deviations must be clearly identified in such reports. A reportable deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
  - (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
  - (2) A malfunction as described in 326 IAC 1-6-2; or
  - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
  - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred or failure to monitor or record the required compliance monitoring is a deviation.
- (e) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (f) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

C.20 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) Annual notification shall be submitted to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) Noncompliance with any condition must be specifically identified. If there are any permit conditions or requirements for which the source is not in compliance at any time during the year, the Permittee must provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be, achieved. The notification must be signed by an authorized individual.
- (c) The annual notice shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in the format attached no later than March 1 of each year to:

Compliance Data Section, Office of Air Quality  
Indiana Department of Environmental Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, IN 46206-6015

- (d) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description:

- (a) Twenty-nine (29) natural gas fired combustion units, rated at 19.5 million British thermal units per hour, total.
- (b) Two (2) natural gas fired boilers, identified as Boiler #1 and Boiler #2, installed in 1989, rated at 3.5 million British thermal units per hour, each.
- (c) One (1) pretreatment process, consisting of two (2) pickling vats, cold water rinse, phosphate coating, cold water rinse, neutralization and water soluble lubricant, equipped with a scrubber for particulate control, exhausting to Stack S-1, capacity: 5,500 pounds of carbon steel tubing per hour. The scrubber is equipped with a knitted mesh polypropylene demister.
- (d) Twenty-two (22) natural gas fired combustion units, rated at 63.04 million British thermal units per hour, total.
- (e) Twenty (20) cold cutting or rotary disc saws, utilizing a water-soluble coolant that washes metal fines from the carbon steel tubing into a sump for collection, capacity: 22 pounds per hour of carbon steel tubing, each. The emissions from all criteria pollutants are negligible from these saws due to the utilization of the water-soluble coolant.
- (f) One (1) bushing/chamfering machine, capacity: 26.4 pounds per hour of carbon steel metal tubing. The emissions from all criteria pollutants are negligible. This process generates large metal chips which fall into a basket and are emptied by hand.
- (g) One (1) non-organic solvent degreasing process, capacity: 5500 pounds of carbon steel tubing per hour. There are no emissions of criteria pollutants associated with this process. The degreaser utilizes an alkaline wash and cold water rinse.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-6.1-5(1)]

#### D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total PM emissions from the pretreatment process is limited to less than 56.9 pounds per hour, equivalent to 249 tons per year to make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 40 CFR 52.21 not applicable.

#### D.1.2 Particulate Matter (PM) [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a), the allowable PM emission rate from the two (2) boilers, identified as Boiler #1 and Boiler #2, shall not exceed 0.6 pounds per million British thermal units per hour heat input, each.

#### D.1.3 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the pretreatment process shall not exceed 8.07 pounds per hour when operating at a process weight rate of 5,500 pounds per hour.



The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

**D.1.4 Preventive Maintenance Plan [326 IAC 1-6-3]**

A Preventive Maintenance Plan, in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for this emissions unit and any control devices

**Compliance Determination Requirements [326 IAC 2-1.1-11]**

**D.1.5 Particulate Matter (PM)**

In order to comply with Condition D.1.3, the scrubber for PM control shall be in operation at all times when the pretreatment process is in operation.

**D.1.6 Testing Requirements [326 IAC 3-6] [326 IAC 6-3-2]**

Within twelve (12) months of issuance of this permit, in order to demonstrate compliance with Condition D.1.3 and to confirm the non-applicability of 326 IAC 2-7, the Permittee shall perform PM and PM<sub>10</sub> testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. Testing shall be conducted in accordance with Section C- Performance Testing.

**Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]**

**D.1.6 Visible Emissions Notations**

- (a) Visible emission notations of the scrubber stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

**D.1.7 Parametric Monitoring**

The Permittee shall record the liquid flow rate and the total static pressure drop across the scrubber used in conjunction with the pretreatment process, at least once per shift when the pretreatment process is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise or unknown events for which response steps

are subsequently devised, the flow rate shall be maintained within the range of 150 to 200 gallons per minute and the pressure drop across the scrubber shall be maintained within a range of 1 to 6 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instruments used for determining the flow rate and the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

**D.1.8 Scrubber and Demister Inspection**

An inspection shall be performed each calendar quarter of the scrubber and demister. Defective scrubber and/or demister part(s) shall be replaced. A record shall be kept of the results of the inspection.

**D.1.9 Failure Detection**

In the event that a scrubber and/or demister failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

**Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]**

**D.1.10 Record Keeping Requirements**

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the scrubber stack exhaust.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain the following:
  - (1) Records of the following operational parameters during normal scrubber operation when venting to the atmosphere:
    - (A) Inlet and outlet differential static pressure;
    - (B) Cleaning cycle operation; and
    - (C) Liquid flow rate
  - (2) Documentation of the dates vents are redirected.
- (c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8 and the dates the vents are redirected.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## MINOR SOURCE OPERATING PERMIT ANNUAL NOTIFICATION

<b>Company Name:</b>	<b>Seymour Tubing, Inc.</b>
<b>Address:</b>	<b>1515 East Fourth Street</b>
<b>City:</b>	<b>Seymour, Indiana 47274</b>
<b>Phone #:</b>	<b>812-523-3638</b>
<b>MSOP #:</b>	<b>071-12403-00019</b>

I hereby certify that Seymour Tubing is ☐ in compliance with the requirements of MSOP **071-12403-00019**.  
☐ not in compliance with the requirements of MSOP **071-12403-00019**.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

<b>Noncompliance:</b>

## Indiana Department of Environmental Management Office of Air Quality

### Addendum to the Technical Support Document for New Construction and Operation

**Source Name:** Seymour Tubing, Inc.  
**Source Location:** 1515 East Fourth Street, Seymour, Indiana 47274  
**County:** Jackson  
**Construction Permit No.:** MSOP 071-12403-00019  
**SIC Code:** 3317  
**Permit Reviewer:** Craig J. Friederich

On May 17, 2001, the Office of Air Quality (OAQ) had a notice published in the Tribune, Seymour, Indiana, stating that Seymour Tubing, Inc. had applied for an operating permit to operate a carbon steel tubing manufacturing source with a scrubber for particulate control. The notice also stated that OAQ proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On June 14, 2001, Lisa Hayhurst of ATC and associates submitted comments on the proposed construction permit. The summary of the comments and corresponding responses are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

#### **Comment:**

Permit Section D.1.6 Testing Requirements

The Draft Permit requires stack testing for the PM and filterable and condensible PM<sub>10</sub>.

We believe this to be an unnecessary demand and requirement due to the emissions present are water vapor. The scrubbers neutralize the sulfuric acid therefore reducing the gaseous sulfuric acid to water vapor. Documentation concerning the emissions was included in the final permit application. Based on this information, we request that the requirement for stack testing in the draft permit be removed.

#### **Response:**

In order to confirm that the amount of PM<sub>10</sub> emitted is less than major levels and that the PM emissions comply with 326 IAC 6-3-2, testing will be required at this source. Usually controls are tested to verify operational compliance. Therefore, no changes to the permit will be made.

Upon further review, the OAQ has decided to make the following changes to the Minor Source Operating Permit: The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language is **bolded**):

The SIC code has been changed in Section A.1 as follows:

A.1 General Information [326 IAC 2-5.1-3(c)] [326 IAC 2-6.1-4(a)]

---

The Permittee owns and operates a stationary carbon steel tubing manufacturing source.

Authorized Individual: Grant Graves  
Source Address: 1515 East Fourth Street, Seymour, Indiana 47274  
Mailing Address: 1515 East Fourth Street, Seymour, Indiana 47274  
Phone Number: 812-523-3638  
SIC Code: ~~420~~ **3317**  
County Location: Jackson  
County Status: Attainment for all criteria pollutants  
Source Status: Minor Source Operating Permit  
Minor Source, under PSD Rules;  
Minor Source, Section 112 of the Clean Air Act

## **Indiana Department of Environmental Management Office of Air Quality**

### **Technical Support Document (TSD) for a Minor Source Operating Permit**

#### **Source Background and Description**

<b>Source Name:</b>	<b>Seymour Tubing, Inc.</b>
<b>Source Location:</b>	<b>1515 East Fourth Street, Seymour, Indiana 47274</b>
<b>County:</b>	<b>Jackson</b>
<b>SIC Code:</b>	<b>420</b>
<b>Operation Permit No.:</b>	<b>MSOP 071-12403-00019</b>
<b>Permit Reviewer:</b>	<b>Craig J. Friederich</b>

The Office of Air Quality (OAQ) has reviewed an application from Seymour Tubing, Inc. relating to the construction and operation of a carbon steel tubing manufacturing source.

#### **Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) Twenty-nine (29) natural gas fired combustion units, used for comfort and process heating, rated at 19.5 million British thermal units per hour, total.
- (b) Two (2) natural gas fired boilers, identified as Boiler #1 and Boiler #2, installed in 1989, exhausting to Stacks B-1 and B-2, rated at 3.5 million British thermal units per hour, each.
- (c) One (1) pretreatment process, consisting of two (2) pickling vats, cold water rinse, phosphate coating, cold water rinse, neutralization and water soluble lubricant, equipped with a scrubber for particulate control, exhausting to Stack S-1, capacity: 5,500 pounds of carbon steel tubing per hour. The scrubber is equipped with a knitted mesh polypropylene demister.

#### **Unpermitted Emission Units and Pollution Control Equipment**

The source also consists of the following unpermitted facilities/units:

- (d) Twenty-two (22) natural gas fired combustion units, used for comfort and process heating, rated at 63.04 million British thermal units per hour, total. These units were constructed between 1991 and 2000. The largest unit has a rating of 3.3 million British thermal units per hour, which yields a potential to emit NO<sub>x</sub> of 1.45 tons per year. All these units are considered exempt level under permitting rules.
- (e) Twenty (20) cold cutting or rotary disc saws, utilizing a water-soluble coolant that washes metal fines from the carbon steel tubing into a sump for collection, capacity: 22 pounds per hour of carbon steel tubing, each. The emissions from all criteria pollutants are negligible from these saws due to the utilization of the water-soluble coolant.

- (f) One (1) bushing/chamfering machine, capacity: 26.4 pounds per hour of carbon steel metal tubing. The emissions from all criteria pollutants are negligible. This process generates large metal chips which fall into a basket and are emptied by hand.
- (g) One (1) non-organic solvent degreasing process, capacity: 5500 pounds of carbon steel tubing per hour. There are no emissions of criteria pollutants associated with this process. The degreaser utilizes an alkaline wash and cold water rinse.

### **New Emission Units and Pollution Control Equipment**

There are no new facilities proposed at this source during this review process.

### **Existing Approvals**

The source has been operating under previous approvals including, but not limited to, the following:

- (a) Registration , issued on June 28, 1989; and
- (b) Exemption 071-0019, issued October 11, 1990.

All conditions from previous approvals were incorporated into this permit.

### **Air Pollution Control Justification as an Integral Part of the Process**

The company has submitted the following justification such that the scrubber be considered as an integral part of the pickling process:

The scrubber is considered an integral portion of the pickling process due to the necessity to mitigate any corrosive effects the sulfuric acid mist might have on the equipment.

IDEM, OAQ has evaluated the justifications and determined that the scrubber will not be considered as an integral part of the pickling process because it is possible to operate the process without the control device. Therefore, the permitting level will be determined using the potential to emit before control. This determination will not affect the level of permitting for this source.

### **Stack Summary**

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
B-1	Boiler	46.0	1.00	1594	470
B-2	Boiler	46.0	1.00	1594	470
S-1	Scrubber	36.0	3.00	48,000	Ambient

### **Enforcement Issue**

All the CWOP/OWOP combustion units are exempt, therefore there are no enforcement actions pending.

## Recommendation

The staff recommends to the Commissioner that the operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on June 21, 2000, with additional information received on March 6, 2001, and April 16, 2001.

## Emission Calculations

See Appendix A (pages 1 through 5 of 5) of this document for detailed emissions calculations.

## Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, the department, or the appropriate local air pollution control agency."

Note: The potential PM emissions from the pretreatment process is 690 tons per year. These emissions are in the form of sulfuric acid mist with a particle size of thirty (30) to seventy (70) microns in size. None of the emissions from the pretreatment process are considered PM<sub>10</sub>.

Pollutant	Potential To Emit (tons/year)
PM	691
PM <sub>10</sub>	2.84
SO <sub>2</sub>	0.225
VOC	2.05
CO	31.4
NO <sub>x</sub>	37.3

HAPs	Potential To Emit (tons/year)
Benzene	0.0008
Dichlorobenzene	0.0005
Formaldehyde	0.028
Toluene	0.001



HAPs	Potential To Emit (tons/year)
Hexane	0.672
Lead	0.0002
Cadmium	0.0004
Nickel	0.0008
Chromium	0.0005
Manganese	0.0001
TOTAL	0.704

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM and NO<sub>x</sub> is equal to or greater than twenty-five(25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1.
- (b) Fugitive Emissions  
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Actual Emissions

No previous emission data has been received from the source.

### Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM <sub>10</sub>	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPS
Pretreatment (Pickling Vats)	less than 249 tons per year, which is equivalent to 56.9 pounds per hour	0.00	0.00	0.00	0.00	0.00	0.00
Fifty-One (51) natural gas-fired combustion units	0.654	2.616	0.207	1.89	28.9	34.42	0.650

	<b>Limited Potential to Emit</b> (tons/year)						
Process/facility	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>VOC</b>	<b>CO</b>	<b>NO<sub>x</sub></b>	<b>HAPS</b>
Two (2) Boilers	0.055	0.222	0.018	0.161	2.45	2.92	0.055
Total Emissions	less than 250 tons per year	2.84	0.225	2.05	31.35	37.34	0.705

- (a) The PM is limited to less than two-hundred fifty (250) tons per year to make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.
- (b) The sulfuric acid mist emitted from the pickling vats is considered PM because the particles are thirty (30) to seventy (70) microns in size. There are no PM<sub>10</sub> emissions associated with this operation.

### County Attainment Status

The source is located in Jackson County.

<b>Pollutant</b>	<b>Status</b>
PM <sub>10</sub>	attainment
SO <sub>2</sub>	attainment
NO <sub>2</sub>	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Jackson County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Jackson County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions  
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, 40 CFR 52.21, or 326 IAC 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

### Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	2.09
PM <sub>10</sub>	2.84
SO <sub>2</sub>	0.225
VOC	2.05
CO	31.35
NO <sub>x</sub>	37.34

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) These emissions were based on the Minor Source Operating Permit application and additional information submitted by the source.

### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source, based on the emissions summarized in this permit, MSOP 071-12403-00019, is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than one hundred (100) tons per year,
- (b) a single hazardous air pollutant (HAP) is less than ten (10) tons per year, and
- (c) any combination of HAPS is less than twenty-five (25) tons/year.

This status is based on all the air approvals issued to the source. This status has been verified by the OAQ inspector assigned to the source.

Note: If the PM emissions from the pretreatment process are determined to be PM<sub>10</sub>, then the source would be subject to the requirements of the Part 70 Permit Program.

### Federal Rule Applicability

- (a) The two (2) natural gas fired boilers identified as Boiler #1 and Boiler #2 are not subject to NSPS Subpart Dc (40 CFR Part 60.40) and 326 IAC 12, because their capacities are less than ten (10) million British thermal units per hour.
- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to the steel pickling process.

- (c) The one (1) non-organic solvent degreasing process is not subject to the National Emission Standards for Hazardous Air Pollutants, 326 IAC 14, (40 CFR 63.460), Subpart T, because it does not use any halogenated solvents. This unit uses an alkaline wash and cold-water rinse.

#### **State Rule Applicability - Entire Source**

##### **326 IAC 2-2 (Prevention of Significant Deterioration)**

Total PM emissions from the pretreatment process shall not exceed 56.9 pounds per hour, equivalent to 249 tons per year. Compliance with this limit will make the requirements of 2-2 (Prevention of Significant Deterioration) not applicable.

##### **326 IAC 2-4.1-1 (New Source Toxics Control)**

This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments. Therefore, 326 IAC 2-4.1-1 is not applicable.

##### **326 IAC 5-1 (Opacity Limitations)**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary alternative opacity limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

#### **State Rule Applicability - Individual Facilities**

##### **326 IAC 6-2-4 (Particulate Emissions Limitations for Facilities Constructed after September 21, 1983)**

The two (2) boilers, known as Boiler #1 and Boiler #2, constructed in 1989, rated at 3.5 million British thermal units per hour, each, must comply with the requirements of 326 IAC 6-2-4. The emission limitations are based on the following equation is given in 326 IAC 6-2-4:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate matter emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The total heat input capacity for the source, including the 3.5 million British thermal units per hour for each boiler, is 7.0 million British thermal units per hour.

$$Pt = 1.09/(7.0)^{0.26} = 0.657\text{lb/mmBtu heat input}$$

Pursuant to 326 IAC 6-2-4(a), for Q less than 10 million British thermal units per hour, Pt shall not exceed 0.6 pound per million British thermal units. Therefore, the two (2) boilers are limited to emissions of 0.6 pound per million British thermal units, each.

Based on Appendix A, the potential PM emission rate for each boiler is:

$$\begin{aligned} 0.028 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) &= 0.006\text{lb/hr} \\ (0.006 \text{ lb/hr} / 3.5 \text{ mmBtu/hr}) &= 0.002\text{lb PM per mmBtu} \end{aligned}$$

Therefore, the two (2) boilers identified as Boiler #1 and Boiler #2, constructed in 1989, will comply with this rule.

### 326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the pretreatment process shall not exceed 8.07 pounds per hour when operating at a process weight rate of 5,500 pounds per hour using the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The PM emissions from the pretreatment process are 0.315 pounds per hour, which is less than the allowable PM emission rate of 8.07 pounds per hour. Therefore, the pretreatment process will comply with this rule.

The scrubber shall be in operation at all times the pretreatment process is in operation, in order to comply with this limit.

### 326 IAC 8-3 (Organic Solvent Degreasing Operations)

The one (1) non-organic solvent degreasing process is not subject to the requirements of 326 IAC 8-3 because this degreaser uses non-VOC containing alkaline wash and cold water rinse.

### Testing Requirements

In order to show compliance with 326 IAC 6-3-2 and to confirm that 326 IAC 2-7 is not applicable, PM and PM<sub>10</sub> testing will be required for the scrubber exhaust for the two (2) pickling vats, associated with the pretreatment process.

### Conclusion

The operation of this carbon steel tubing manufacturing source shall be subject to the conditions of the attached proposed Minor Source Operating Permit 071-12403-00019.

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**

Page 1 of 5 TSD App A

**Company Name:** Seymour Tubing, Inc.  
**Address City IN Zip:** 1515 East Fourth Street, Seymour, IN 47274  
**MSOP:** 071-12403  
**Plt ID:** 071-00019  
**Reviewer:** Craig J. Friederich  
**Date:** June 21, 2000

**Boiler #1 and Boiler #2**

Heat Input Capacity                      Potential Throughput  
MMBtu/hr                                      MMBtu/hr

7.00

58.38

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.055	0.222	0.018	2.92	0.161	2.45

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,050 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 2 for HAPs emissions calculations.

**Appendix A: Emissions Calculations****Natural Gas Combustion Only****MM BTU/HR <100****HAPs Emissions**

**Company Name:** Seymour Tubing, Inc.  
**Address City IN Zip:** 1515 East Fourth Street, Seymour, IN 47274  
**MSOP:** 071-12403  
**Plt ID:** 071-00019  
**Reviewer:** Craig J. Friederich  
**Date:** June 21, 2000

**Boiler #1 and Boiler #2****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	6.130E-05	3.503E-05	2.189E-03	5.254E-02	9.925E-05

**HAPs - Metals**

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPs
Potential Emission in tons/yr	1.460E-05	3.211E-05	4.087E-05	1.109E-05	6.130E-05	0.055

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations**  
**Natural Gas Combustion Only**  
**MM BTU/HR <100**

**Company Name:** Seymour Tubing, Inc.  
**Address City IN Zip:** 1515 East Fourth Street, Seymour, IN 47274  
**MSOP:** 071-12403  
**Plt ID:** 071-00019  
**Reviewer:** Craig J. Friederich  
**Date:** June 21, 2000

**Total Natural Gas Combustion-Direct Heating**

Heat Input Capacity                      Potential Throughput  
MMBtu/hr                                      MMBtu/yr

82.54

688.40

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.654	2.62	0.207	34.4	1.89	28.9

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

\*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,050 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Note: Check the applicable rules and test methods for PM and PM10 when using the above emission factors to confirm that the correct factor is used (i.e., condensable included/not included).

See page 4 for HAPs emissions calculations.



**Appendix A: Emissions Calculations****Natural Gas Combustion Only****MM BTU/HR <100****HAPs Emissions**

**Company Name:** Seymour Tubing, Inc.  
**Address City IN Zip:** 1515 East Fourth Street, Seymour, IN 47274  
**MSOP:** 071-12403  
**Plt ID:** 071-00019  
**Reviewer:** Craig J. Friederich  
**Date:** June 21, 2000

**Total Natural Gas Combustion-Direct Heating****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	7.228E-04	4.130E-04	2.582E-02	6.196E-01	1.170E-03

**HAPs - Metals**

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03	Total HAPs
Potential Emission in tons/yr	1.721E-04	3.786E-04	4.819E-04	1.308E-04	7.228E-04	0.650

Methodology is the same as page 3.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emissions Calculations**  
**Emissions From Pickling Operations**

Page 5 of 5 TSD App A

**Company Name:** Seymour Tubing, Inc.  
**Address City IN Zip:** 1515 East Fourth Street, Seymour, IN 47274  
**MSOP:** 071-12403  
**Pit ID:** 071-00019  
**Reviewer:** Craig J. Friederich  
**Date:** June 21, 2000

**No Controls**

Inlet Air Flow =	50,000	SCFM
Density =	0.075	lb/ft <sup>3</sup>
Mass Flow Rate =	SCFM x Density	
50,000 x 0.075 =	3750	lbs/min
Sulfuric Acid Inlet =	700	ppm
3750 x .0007=	2.63	lbs/min
Yields 60 min/hr	157.5	lbs/hr
Based on 8760 hrs/yr:		
157.5 x 8760=	1379700	lbs/yr
There are 2000 lbs/ton		
1379700/2000=	<b>690</b>	tons/yr

**With Controls**

Scrubber Efficiency 99.8%		
99.8% x 157.5lbs/hr=	157.2	
157.5 lbs/hr-157.2=	0.315	lbs/hr
0.315 x 24 hrs/day=	7.56	lbs/day
7.56 x 365 days/yr =	2759	lbs/yr
2759.4/2000lbs/ton=	<b>1.38</b>	tons/yr